

Sign-Off Procedure Required
before Powering the CDF Toroids
(this is a Safety Procedure)

This procedure outlines the steps to be taken to gain approval
before powering the CDF Toroids.

Approvals:

(RD/CDF Department Head)

(Date)

(Research Division Head)

(Date)

(Accelerator Division Head)

(Date)

1.0 Controlled Copies of this procedure.

Four controlled copies of this procedure will exist:

1. At the desk of the CDF Operations Electrical Group Leader
in the CDF Assembly Building
2. In the RD / CDF Department Office
3. In the Research Division Office
4. In the Accelerator Division Office

All other copies will be marked, " INFORMATIONAL COPY ONLY"

2.0 The Procedure

The CDF Operations Electrical Group Leader (or trained designee) must execute this procedure and the associated checklist whenever the Toroids are to be powered for the first time after any of the following situations:

- 1) Any Collider Installation period.
- 2) Any extended Collider Shutdown or Standby period.
"Extended" is defined here as greater than 30 days.
- 3) Any Collider Run Access period when work is done on the Toroids, the water cooling system for the Toroids, the Toroid coils, the Toroid Power Supply system, the Toroid noise filter system.

NOTE: The CDF Operations Electrical Group Leader enforces the execution of the procedure by administrative lock out / tag out of the Toroid Power Supply at the beginning of the access, shutdown, or installation period .

The procedure steps:

1. The CDF Operations Electrical Group Leader should complete a copy of the checklist in section 3.0 of this document.
2. After completing the checklist, the CDF Operations Electrical Group Leader obtains the CDF Department Head's signature before powering the CDF Toroids.
3. The CDF Operations Electrical Group Leader distributes copies of the checklist as follows:
 - a) the original check list is placed in the CDF Department Office in the "Operational Readiness Clearance" documentation,
 - b) **one copy of the completed check list is posted on the side of the Toroid Power Supply,**
 - c) one copy is placed in the CDF Experiment logbook,
 - d) one copy is placed in the CDF Department Office copy of this procedure.

e) one copy is sent to the CDF High Current Power Supply Review Committee.

3.0 Checklists

The "Procedure Execution Form", or "Checklist", is on the following page. Copies of the checklist can be found inside the front pocket of this procedure.

CDF Toroids: Initial Power On Authorization

1. **Alignment Survey of Toroid is complete.**

(CDF Operations Mechanical Group Leader)

2. **Authorization is in place in the "CDF Operational Readiness Clearance" documentation from the CDF " High Current Power Supply Review Committee".**

(CDF Operational Electrical Group Leader)

3. **CDF PROC - 501 "Toroid System Inspection Checklist Procedure" has been properly executed.**

(CDF Operations Electrical Group Leader)

4. **CDF PROC - 502 "Toroid Power Supply LCW Checklist Procedure" has been properly executed.**

(CDF Operations Electrical Group Leader)

5. **CDF PROC - 503 " CDF Toroid Power Supply Turn-On Procedure" has been completed up to the point of removing the Power Supply lock**

(CDF Operations Electrical Group Leader)

COMMENTS:

Checklist completed by: _____ Date: _____

Permission for Toroid
Power On given by: _____ Date: _____
(CDF Department Head)

4.0 Deviations

None are allowed.

5.0 Required Training and Authorized Training Personnel.

CDF Department Heads are authorized instructors. Training consists of reading this procedure with a department head.

The training should be documented on a standard Fermilab Training Form and the Training Expiration date should be tied to the end date of the Collider Run (e.g. "the end of Collider Run Ia").

The completed forms must be inserted in the CDF Department Office copy of this procedure.

6.0 Training Materials.

Section 2.0 of this procedure.

No additional written materials exist.

7.0 List of Trained People for this procedure.

Eventually the list may reside in a lab-wide database.

Until that time, a list of trained personnel for this procedure should be kept in the CDF Department copy of the procedure in a separate section at the end of the procedure.

8.0 References and Supporting Documentation.

none.